## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. R2-2002-0067 WASTE DISCHARGE REQUIREMENTS FOR:

# CALIFORNIA DEPARTMENT OF PARKS AND RECREATION, MARCONI CONFERENCE CENTER, MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

- 1. The California Department of Parks and Recreation, hereinafter called the Discharger, submitted a Report of Waste Discharge dated January 28, 1985 for the discharge of domestic wastewater from the Marconi Conference Center hereinafter called the Center. Waste Discharge Requirements, Order No. 85-37, for the Center were issued by the Board on April 30, 1985.
- 2. The Center is currently permitted under Order No. 92-066, revised Waste Discharge Requirements, which were adopted by the Board on June 17, 1992, replacing Order No. 85-37.
- 3. On February 21, 2002, the Discharger submitted a Report of Waste Discharge which describes the proposed replacement of the Center's existing wastewater treatment facilities and to amend the existing Waste Discharge Requirements reflecting the replacement of the Center's existing wastewater treatment facilities.
- 4. The Center is located on the east side of Highway One, near the town of Marshall, in western Marin County. The Center consists of thirteen buildings with facilities for guest lodging, meetings, dining, and on-site staff. These facilities can accommodate 97 overnight guests and 125 day users.
- 5. The Discharger operates wastewater treatment facilities at the Center. The Center's existing wastewater treatment facilities consist of a collection system (with one lift station), a wastewater treatment plant, storage tank, and a wastewater disposal system. The wastewater treatment plant and disposal system are located on a hillside upslope of the Center and about 1,000 feet upslope from Tomales Bay, waters of the State. The Center's daily sewage flows oscillate greatly due to the variable attendance rate at the Center. Flows may be as low as several hundred gallons per day (gpd), but typically range from 4,000 to 8,000 gpd.
- 6. The Center's October 1992 general plan describes expansion of the Center's facilities to serve 200 overnight guests, 100 day users, 12 on-site staff, and 40 day staff. Projected wastewater flows range from 12,000 to 20,000 gpd. Expansion and upgrade of the existing wastewater treatment facilities will be necessary to treat the wastewater generated from future use increases.
- 7. In order to accommodate the future wastewater flow increases, the Discharger is dividing the expansion and upgrade of the existing wastewater treatment facilities into two phases. During the first phase, the Discharger would replace the existing wastewater treatment plant with a new

- wastewater treatment plant. During the second phase, the Discharger would upgrade the existing wastewater disposal system.
- 8. A study conducted by the Discharger prior to 1992, evaluated the performance of the wastewater treatment facilities and concluded that they do not perform at the rated capacity. Therefore, Order No. 92-066 authorized a wastewater flow capacity of 15,000 gpd, which is less than the rated capacity of the facilities. Currently, the existing wastewater treatment plant performs adequately; however, in order to increase the treatment capacity of the facilities, upgrade of both the wastewater treatment plant and the wastewater disposal system is needed.
- 9. This Order approves the replacement of the existing wastewater treatment plant, but does not authorize an increase in the wastewater flow capacity because of the inadequate capacity of the existing wastewater disposal system. It is anticipated that the Discharger will submit a request to amend this Order to upgrade the existing wastewater disposal system and increase the wastewater flow capacity at some future date.

#### **EXISTING WASTEWATER TREATEMENT FACILITIES**

- 10. The Center's existing wastewater treatment facilities consist of a collection system (with one lift station), a wastewater treatment plant, storage tank, and a wastewater disposal system.
- 11. The wastewater treatment plant's major treatment units include, a comminutor, an extended aeration package unit, a sand filter, and chlorination unit. The extended aeration unit was installed in the early 1970s and has a rated capacity of 25,000 gpd. The treatment plant discharges to a 5,000 gallon storage tank. The treatment plant was refurbished in 1984. Currently operating at flows significantly below its rated capacity, the treatment plant functions satisfactorily.
- 12. The wastewater disposal system consists of a leaching trench (similar to a conventional leaching system except that it extends up to the ground surface) that accepts chlorinated secondary effluent from the storage tank through a dosing siphon. The leaching trench is placed in a confined area of the site, which is designated for the disposal of the effluent (disposal field). Any effluent not absorbed into the trench due to excessive rainfall and saturated soils, flows out of the top of the trench, and over the ground surface at the disposal field. A berm encloses the 1.8-acre disposal field. A ditch system and pump collect any surface runoff and return it to the storage tank for reapplication to the disposal field. On the average it has been calculated that the trench overflow should only occur seven days a year. To date, however, no trench overflow has ever occurred at the disposal site, probably due to the low wastewater flows that the Center has experienced.
- 13. The disposal field has a rated capacity of 11,700 gpd as listed in Order No. 92-066. However, a recent site evaluation found percolation rates to be currently much lower than the rates obtained when the disposal field was originally constructed in 1984. Based on this new data, a new disposal system will need to be considered in order to handle future post-expansion flow.

#### NEW WASTEWATER TREATMENT PLANT

14. Due to the age of the treatment plant and lift station, and potential future increase in wastewater flows, the Discharger has proposed to construct a new wastewater treatment plant for the Center that

will accommodate flows of 12,000 to 20,000 gpd. The Discharger has submitted a Design Plan titled, "Marconi Conference Center, Wastewater Treatment Plant," dated January 17, 2002, for upgrading the wastewater treatment plant, herein incorporated by reference. The new wastewater treatment plant will consist of a new lift station, an influent force main that has been partially constructed, an equalization basin, a sequencing batch reactor (SBR) treatment unit, and an effluent lift station and force main. Attachment No. 2 of this Order shows a preliminary site plan for the new wastewater treatment plant.

- 15. To conform to the 1992 general plan, the new treatment plant will be built near the boundary of the site. It is anticipated that a SBR treatment unit will be installed at this location inside a new enclosed building. The existing lift station will be replaced with a completely buried lift station sized to handle anticipated future wastewater flows. Due to the relocation of the wastewater treatment plant, modifications to the collection system will be necessary. A new force main will be constructed east of the new lift station, instead of the current route to the west.
- 16. The new wastewater treatment plant will consist of a 49'x12'x11.5' prefabricated steel tank equipped with a SBR process basin, an influent equalization basin, an aerobic sludge/holding basin, an effluent chamber and lift station, and a chlorinator unit. The lift station will pump treated wastewater to the disposal field at regular intervals. The waste sludge from the plant will be held in the aerobic sludge/holding basin, which will be pumped and disposed of off-site at an approved facility approximately every two weeks.
- 17. The propane generator located at the existing wastewater treatment plant will be relocated to the new wastewater treatment plant to provide backup power. The wastewater treatment plant will be equipped with high-level alarms. All alarms will be connected to an autodialer that contacts the plant operator upon plant failure.
- 18. Per United States Environmental Protection Agency (USEPA) recommendations, the new wastewater treatment plant will be located at least 20 feet from the property line. The wastewater treatment plant will be enclosed in a building to reduce aesthetic impacts.

#### Force Main

19. Due to the relocation of the wastewater plant, a new force main will need to be constructed. In 2000, approximately 350 feet of polyvinyl chloride (PVC) force main was installed from the existing influent lift station to the edge of the powerhouse building. The remaining section of force main (650 feet of PVC pipe) will need to be constructed from the edge of the powerhouse building to the inlet of the new wastewater treatment plant. Since the newly installed section of force main is 4 inches in diameter, the remaining section shall be 4 inches in diameter as well.

#### Influent Lift Station

20. The new lift station will be located in the same general location as the existing influent lift station; however, it will be completely buried to minimize visual impacts to the Marconi Hotel. The new influent lift station will be a package lift station with two submersible pumps (one will be used for stand-by). The submersible pumps will be sized to pump 150 gallons per minute with a Total Dynamic Head (TDH) of 35 feet.

21. Power will be supplied to the lift station from a nearby electrical drop. The control panel of the lift station will be supplied with a connection for a generator in the event of power failure. In addition, the lift station will be equipped with high level and pump fail alarms. All alarms will be connected to an autodialer that contacts the plant operator upon plant failure.

#### WASTEWATER FLOWS

#### **Existing Wastewater Flows**

- 22. Currently, the Center has capacity to house approximately 100 overnight users. The number of day users is limited and is assumed to minimally contribute to wastewater flows. There are currently six people living in onsite residences. There are approximately ten additional employees that work at the Center, but they live offsite.
- 23. In order to determine the existing wastewater flows generated from the above users, flow data was obtained from the Discharger for the period from November 1998 through November 2000. The data was from a meter located at the wastewater treatment plant. Based on this data the following flows were determined:

Average Daily Flow = 6,069 gpd Maximum Daily Flow = 10,000 gpd

#### Potential Future Wastewater Flows

24. In order to determine the capacity requirements for a replacement treatment plant to serve a facility double the size of the current Center (as proposed in the 1992 general plan), estimated future flows were calculated. According to the general plan, the land uses for the Center are based on an ultimate carrying capacity of 200 overnight users including staff and 100 day users. This ultimate carrying capacity is approximately double that of the current capacity. Therefore, to determine expected future wastewater flows, existing wastewater flows were doubled. These values are shown below.

Future Average Daily Flow = 12,000 gpd Future Maximum Daily Flow = 20,000 gpd

#### WASTEWATER CHARACTERISTICS

#### Future Effluent Characteristics

25. The new wastewater treatment plant will be designed to meet the limitations in the Effluent Limitation of this Order.

#### **BASIN PLAN AND BENEFICIAL USES**

26. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, 1995,

respectively. The Basin Plan prohibits the discharge of wastewater with particular constituents of concern to beneficial uses into non-tidal Tomales Bay. The Basin Plan also requires that existing water quality be maintained unless otherwise provided by the State Board. The Basin Plan contains water quality objectives for Tomales Bay.

- 27. The beneficial uses of Tomales Bay are:
  - a. Water contact and non-contact recreation
  - b. Ocean commercial and sport fishing
  - c. Wildlife habitat
  - d. Preservation of rare and endangered species
  - e. Marin habitat
  - f. Fish migration
  - g. Fish spawning
  - h. Shellfish harvesting

#### REGULATORY ISSUES AND APPLICATIONS

- 28. The discharge is currently subject to Waste Discharge Requirements, in Order No. 92-066, adopted by the Board on June 17, 1992. Updated and revised Waste Discharge Requirements are contained in this Order, and Order No. 92-066 is hereby rescinded.
- 29. On December 13, 2001, the Discharger, as the California Environmental Quality Act (CEQA) Lead Agency, determined this project to be Categorically Exempt under Section 15302 Class (2) of the CEQA Guidelines.
- 30. Adoption of revised Waste Discharge Requirements is exempt from the provisions of the CEQA (Public Resources Code, Section 2100 et. seq) pursuant to Section 13389 of the California Water Code.
- 31. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with the opportunity for a public hearing and opportunity to submit their written views and recommendations.
- 32. The Board, in a properly noticed public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the California Department of Parks and Recreation (Discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

#### A. Discharge Prohibitions

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

- 2. The discharge of waste other than domestic waste into the waste treatment and disposal system is prohibited.
- 3. Wastewater shall not be allowed to flow from the disposal field via either surface flow or surfacing after percolation.
- 4. There shall be no bypass or overflow of waste to waters of the state from the collection, treatment or disposal system.
- 5. Discharge of wastewater to any land other than the disposal field is prohibited unless authorized in writing by the Executive Officer in accordance with provisions of this order.
- 6. Wastewater ponding that could provide a breeding area for mosquito is prohibited.
- 7. The disposal of waste that causes or contributes to degradation of ground or surface water or impairment of beneficial uses of said waters is prohibited.

#### **B.** Effluent Limitations

Effluent from the wastewater treatment plant shall meet the following limits at all times, except as indicated:

Parameter	Value
Settleable Solids	1.0 ml/l-hr (maximum)
Suspended Solids	30 mg/l
Total Nitrogen	10 mg/l
5-day BOD	30 mg/l (monthly average)
Dissolved Oxygen	2.0 mg/l (minimum)
Dissolved Sulfide	0.1 mg/l (maximum)
pН	Not less than 6.0 nor greater than 9.0
Coliform Organisms	Median MPN shall not exceed 240 organisms per 100 ml at some point in the treatment system (median value to be
	obtained from the last 7 samples)

#### C. Provisions

- 1. By July 19, 2002, the Discharger shall submit a schedule for the completion of the new wastewater treatment plant.
- 2. The Discharger shall construct the new wastewater treatment plant in accordance with Design Plans titled, "Marconi Conference Center, Wastewater Treatment Plant," dated January 17, 2002, and submitted to the Regional Board on February 1, 2002.
- 3. Flow to either the existing or new wastewater treatment plant shall not exceed 15,000 gpd (monthly average). These plants shall treat wastewater from only the Center's existing facilities as described in finding No. 4. The Discharger shall submit a Report of

- Waste Discharge for amendment of this Order for the Board's consideration of any proposed treatment capacity increases.
- 4. Unless otherwise specified, the Discharger shall comply with all sections of this Order immediately.
- 5. Sludge and other solids removed from liquid wastes shall be disposed of at a legal point of disposal and in accordance with the provisions of Division 7.5 of California Water Code. For the purposes of this requirement, a legal point of disposal is defined as one for which Waste Discharge Requirements have been prescribed by a Regional Board and which is in full compliance therewith.
- 6. All sludge treatment, processing, storage or disposal activities under the Discharger's control shall be in compliance with current state and federal regulations.
- 7. The Discharger shall employ a treatment plant operator with at least a Grade II certification to supervise operation of either the existing or new wastewater treatment plant, or demonstrate to the Executive Officer's satisfaction that an equivalent level of supervision is being maintained.
- 8. The Discharger shall maintain a copy of this Order onsite so that it will be available at all times to personnel operating waste treatment and disposal facilities.
- 9. The Discharger shall comply with the manufacturer's recommended system start-up sampling program (Attachment No. 3) for the new wastewater treatment plant.
- 10. The Discharger shall comply with the self-monitoring program (Attachment No. 4), and all items of the December 1986 "Standard Provisions and Reporting Requirements" (Attachment No. 5), with the exception of Standard Provisions Nos. A.5, A.6, A.7, and C.6.
- 11. The Discharger shall notify the Regional Board, in writing, at least 120 days before making any material change in the character, location, or volume of the wastewater treatment or disposal practices described or regulated by this Order, except in emergencies, in which case the Regional Board shall be notified as soon as possible.
- 12. By July 19, 2002, the Discharger shall submit to the Regional Board an updated Operational and Maintenance Manual for the Center's entire wastewater treatment and disposal facilities.
- 13. The Discharger shall permit the Regional Board or its authorized representative in accordance with California Water Code Section 13267(c):
  - a. Entry upon premises in which an effluent source is located or in which any required records are kept.
  - b. Access to copy any records required to be kept under the terms and conditions of this Order.
  - c. Inspection of monitoring equipment or records, and

- d. Sampling of any discharge.
- 14. In the event of any change in control or ownership of the land or the waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to the Regional Board.
- 15. This Regional Board will review this Order periodically and may revise the requirements as necessary.
- 16. This Order supersedes order No 92-066, which is hereby rescinded.
- I, Loretta K. Barsamian, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 19, 2002.

Loretta K. Barsamian Executive Officer

#### Attachments:

- 1. Location map
- 2. Preliminary site plan for the proposed wastewater facilities
- 3. Recommended start-up sampling program (by CASS Water Engineering, Inc.) for the new wastewater
  - treatment plant
- 4. Self-Monitoring Program
- 5. Standard Provisions & Reporting Requirements

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

#### PART B

#### SELF-MONITORING PROGRAM

## FOR CALIFORNIA DEPARTMENT OF PARKS AND REACREATION

## MARCONI CONFERENCE CENTER

MARIN COUNTY

ORDER NO. R2-2002-0067

**CONSISTS OF:** 

PART A, DATED DECEMBER 1986

**AND** 

PART B

#### I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No 73-16.

The principal purposes of a monitoring program by the waste discharger, also referred to as self-monitoring program, are:

- (1) To document compliance with Waste Discharge Requirements and prohibitions established by this Regional Board.
- (2) To facilitate self-policing by the Discharger in the prevention and abatement of pollution arising from waste discharge.

#### II. <u>DESCRIPTION OF SAMPLING</u>

**NOTE:** A map showing the locations of the sampling stations described below shall accompany each monthly report, and the annual report for each calendar year.

#### 1. Influent

Influent to the Center's treatment plant shall be sampled as described below.

Paramete	er	5	amp	le	C	οl	lec	tıc	n	

BOD Quarterly Total Suspended Solids Quarterly

#### 2. Effluent

Effluent from the Center's treatment plant shall be sampled prior to disposal for the following parameters and frequencies:

Parameter	Sample Collection
Flow <sup>1</sup>	Daily (continuous)

Weekly Settleable Solids **Total Suspended Solids** Monthly Total Nitrogen Monthly 5-day BOD Monthly Dissolved Oxygen Monthly Dissolved Sulfide Monthly Monthly рH **Total Coliform** Monthly

#### 3. Start-up Sampling

<sup>&</sup>lt;sup>1</sup> Both daily flow and monthly average flow (in gallons per day) shall be reported.

During the start-up of new treatment facilities, or any period when the treatment process is disrupted, influent and effluent sampling for BOD, TSS, and Total Nitrogen shall be conducted weekly.

#### 4. Leachfield Monitoring

When discharge occurs during rain events, the Discharger shall monitor and record the water depth in the effluent disposal field (leachfield) five hours after dosing.

#### 5. Observations

- A. The Discharger shall make weekly observations of the treatment plant and its perimeter, recording plant operation and any odors (strength, sources, and area effected).
- B. The Discharger shall also make weekly observations of the disposal area. At the leachfield, the Discharger shall record any evidence of surfacing wastewater and any odors (strength, area affected).

#### III. REPORTS TO BE FILED WITH THE REGIONAL BOARD

#### 1. <u>Violations of Requirements</u>

A report shall be made of any accidental spill of waste. Accidental spills shall be reported to this Regional Board by telephone immediately after detected at (510) 622-2300. A subsequent written report shall be filed with the Regional Board within five (5) days and shall contain information relative to:

- A. Nature of waste or pollutant;
- B. Quantity involved;
- C. Cause of spill;
- D. Estimated size of affected area;
- E. Nature of effects (i.e., fish kill, discoloration of receiving water, etc.); and,
- F. Corrective measures that have been taken, or planned, and a schedule of these activities.

#### 2. <u>Self-Monitoring Reports</u>

Written reports shall be filed regularly for each calendar quarter and submitted by the fifteenth day of the following month. The reports shall be comprised of the following:

#### A. Letter of Transmittal

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications. Monitoring reports and the letter transmitting reports shall be signed by a responsible official. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct. If the report is included in a summary report of more than one California State Park facility, then the cover letter should include an individual discussion of the compliance of each facility.

#### B. Data Results

All results observed or analyzed in Part B, Section II of this Program, including dates and times of sampling and/or observations.

#### C. Map

A map shall accompany the report, showing sampling and observation station locations.

#### 3. Annual Report

An annual report for each calendar year shall be submitted to the Regional Board by February 15<sup>th</sup> of the following year. The required contents of the annual report are described in Section G.5 of Part A.

I, Loretta K.	Barsamian,	Executive	Officer,	hereby	certify	that the	foregoing	Self-Mo	onitoring
Program:									

- 1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with Waste Discharge Requirements established in Regional Board Order No. R2-2002-0067.
- 2. Is effective on the date shown below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer.

Loretta K. Barsamian,
Executive Officer

Date
Attachment:
Standard Provisions